IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Docket No. UNIU110.001APC

Yoshiki Nakagawa et al.

Application No.: 10/541,996 Group Art Unit: 1796

Confirmation No.: 6606 Examiner: Boyle Robert C

Filed: April 10, 2006

For: POLYMER AND CURABLE COMPOSITION IMPROVED IN STORAGE STABILITY

DECLARATION UNDER RULE 1.132

Commissioner for Patents
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Sir:

I, Jiro Okai, a citizen of Japan and residing at 2-24, Sakagami 6-Chome, Tarumi-Ku, Kobe, Hyogo 655-0895, Japan, declare and Say as follows:

1. I was graduated from Faculity of Engineering Department of SOJO University in March, 1993.
I earned a master' s degree in the field of chemistry Department of SOJO University in March, 1995 and a doctorate degree in the field of chemistry Department of Hiroshima University in March, 1998.

2. Since April, 1998 to the present time, I have been employed

by KANEKA CORPORATION.

3. Since 2006 to the present time, I have been in charge of the research and development of Oligomers Research Team Polymers R &D Group in the High Performance Polymers Division.

4. I am one of the inventors of the above-identified application and am familiar with the subject matter thereof.

5. I have read the Official Action mailed and the references cited therein and are familiar with the subject matter thereof.

6. Contents of Experiments:

[Objective]

The objective of the present experiment is to show, based on data, the unexpected effect of methyl ester that improve retarded curing time after storage compared to buthyl ester or ethyl ester.

[Experimental Method]

1. Preparation of curable composition employed the procedure as described below.

The 50 parts of DMA (dimethyl adipate), DEA (diethyl adipate), DBA (dibuthyl adipate), DIDP (diisodecyl phthalate), or DOP (dioctyl phthalate), 1.5 parts of vinyl trimethoxysilane, 2 parts of N-(β-aminoethyl)-γ-aminopropyltrimethoxysilane were sufficiently mixed into 100 parts of the polymer (10) obtained in Comparative example 6 of the present specification, using hands in a nitrogen atmosphere. Thereafter, 1 part of tetravalent Sn catalyst (dibuthyltin diacetyl acetonate) was added thereto, so as to prepare a one-component composition.

[Evaluation Method]

The one-component compositions produced above were stored at 50℃ for 4 weeks. The compositions obtained after the storage for 4 weeks, and the composition obtained before the storage, were cured at a room temperature. The skinning time was evaluated by comparison of these compositions. The following table shows the measurement result of the properties of the compositions.

[Table 1]

	ester compound	skinning time (minute)	
		initial	4 weeks
New Example 1	DMA	22	19
New comparative Example 1	DEA	22	105
New comparative Example 2	DBA	22	185
New comparative Example 3	DOP	30	120
Comparative Example 7	DIDP	30	160

[Experimental result]

As demonstrated by the above Table 1, a composition of the present invention shown in the above Experimental Example exhibits advantageous effects, stable curability even after storage, as compared to the above Comparative Experimental Example 7 and new comparative examples 1 to 3 that employed the same polymer and DEA (diethyl adipate), DBA (dibuthyl adipate), DIDP (diisodecyl phthalate), or DOP (dioctyl phthalate).

7. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 4th day of November, 2010

Jiro Okai

Jiro Okai